



# TORQ Analysis of Cutting and Slicing Machine Setters, Operators, and Tenders to Sewing Machine Operators




## INPUT SECTION:

Transfer	Title	O* NET	Filters		
From Title:	Cutting and Slicing Machine Setters, Operators, and Tenders	51-9032.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Sewing Machine Operators	51-6031.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

## OUTPUT SECTION:

Grand TORQ:














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Ability TORQ				Skills TORQ				Knowledge TORQ			
Level		92		Level		91		Level		84	
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Visual Color Discrimination	46	14	56	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Arm-Hand Steadiness	51	3	65								

LEVEL and IMPT (IMPORTANCE) refer to the Target Sewing Machine Operators. GAP refers to level difference between Cutting and Slicing Machine Setters, Operators, and Tenders and Sewing Machine Operators.

## ASK ANALYSIS

### Ability Level Comparison - Abilities with importance scores over 50

Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Sewing Machine Operators	Importance
Arm-Hand Steadiness	48 	51 	65 
Manual Dexterity	46 	42 	62 
Control Precision	50 	42 	62 
Rate Control	42 	39 	59 
Information Ordering	48 	37 	56 
Finger Dexterity	51 	44 	56 
Near Vision	48 	48 	56 
Visual Color Discrimination	32 	46 	56 
Problem Sensitivity	44 	39 	53 
Multilimb Coordination	48 	37 	53 



Deductive Reasoning	42	35	50
Visualization	44	39	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Sewing Machine Operators	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Sewing Machine Operators	Importance

Experience & Education Comparison					
Related Work Experience Comparison			Required Education Level Comparison		
Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Sewing Machine Operators	Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Sewing Machine Operators
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	0%	0%	Post-Masters Cert	0%	0%
4-6 years	1%	8%	Master's Degree	0%	0%
2-4 years	13%	13%	Post-Bachelor Cert	0%	0%
1-2 years	23%	9%	Bachelors	0%	2%
6-12 months	1%	11%	AA or Equiv	0%	0%
3-6 months	12%	0%	Some College	10%	8%
1-3 months	1%	5%	Post-Secondary Certificate	1%	2%
0-1 month	10%	0%	High School Diploma or GED	60%	12%
None	36%	51%	No HSD or GED	27%	73%
Cutting and Slicing Machine Setters, Operators, and Tenders			Sewing Machine Operators		
Most Common Educational/Training Requirement:					
Moderate-term on-the-job training			Moderate-term on-the-job training		
Job Zone Comparison					
2 - Job Zone Two: Some Preparation Needed			1 - Job Zone One: Little or No Preparation Needed		
Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.			No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.		
These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.			These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.		
Employees in these occupations need anywhere from a few months to one year of working with experienced employees.			Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.		

## Tasks



## Cutting and Slicing Machine Setters, Operators, and Tenders

### Core Tasks

#### Generalized Work Activities:

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

### Specific Tasks

#### Occupation Specific Tasks:

- Adjust machine controls to alter position, alignment, speed, or pressure.
- Change or replace saw blades, cables, cutter heads, and grinding wheels, using hand tools.
- Clean and lubricate cutting machines, conveyors, blades, saws, or knives, using steam hoses, scrapers, brushes, or oil cans.
- Cut stock manually to prepare for machine cutting, using tools such as knives, cleavers, handsaws, or hammers and chisels.
- Direct workers on cutting teams.
- Examine, measure, and weigh materials or products to verify conformance to specifications, using measuring devices such as rulers, micrometers, or scales.
- Feed stock into cutting machines, onto conveyors, or under cutting blades, by threading, guiding, pushing, or turning handwheels.
- Maintain production records, such as quantities, types, and dimensions of materials produced.
- Mark cutting lines or identifying information on stock, using marking pencils, rulers, or scribes.
- Monitor operation of cutting or slicing machines to detect malfunctions or to determine whether supplies need

## Sewing Machine Operators

### Core Tasks

#### Generalized Work Activities:

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

### Specific Tasks

#### Occupation Specific Tasks:

- Attach buttons, hooks, zippers, fasteners, or other accessories to fabric, using feeding hoppers or clamp holders.
- Attach tape, trim, appliques, or elastic to specified garments or garment parts, according to item specifications.
- Baste edges of material to align and temporarily secure parts for final assembly.
- Cut excess material or thread from finished products.
- Cut materials according to specifications, using blades, scissors, or electric knives.
- Draw markings or pin appliques on fabric to obtain variations in design.
- Examine and measure finished articles to verify conformance to standards, using rulers.
- Fold or stretch edges or lengths of items while sewing, in order to facilitate forming specified sections.
- Guide garments or garment parts under machine needles and presser feet to sew parts together.
- Inspect garments, and examine repair tags and markings on garments to locate defects or damage, and mark errors as necessary.
- Match cloth pieces in correct sequences prior to sewing them, and verify that dye lots and patterns match.
- Monitor machine operation to detect problems such as defective stitching,



replenishment.

- Move stock or scrap to and from machines manually, or by using carts, handtrucks, or lift trucks.
- Operate cranes, or signal crane operators to position or remove stone from cars or saw beds.
- Position stock along cutting lines, or against stops on beds of scoring or cutting machines.
- Position width gauge blocks between blades, and level blades and insert wedges into frames to secure blades to frames.
- Press buttons, pull levers, or depress pedals to start and operate cutting and slicing machines.
- Remove completed materials or products from cutting or slicing machines, and stack or store them for additional processing.
- Remove defective or substandard materials from machines, and readjust machine components so that products meet standards.
- Review work orders, blueprints, specifications, or job samples to determine components, settings, and adjustments for cutting and slicing machines.
- Select and install machine components such as cutting blades, rollers, and templates, according to specifications, using hand tools.
- Set up, operate, or tend machines that cut or slice materials, such as glass, stone, cork, rubber, tobacco, food, paper, or insulating material.
- Sharpen cutting blades, knives, or saws, using files, bench grinders, or honing stones.
- Stack and sort cut material for packaging, further processing, or shipping, according to types and sizes of material.
- Start machines to verify setups, and make any necessary adjustments.
- Start pumps to circulate water and abrasives onto blades or cables during cutting.
- Tighten pulleys or add abrasives to maintain cutting speeds.
- Turn cranks or press buttons to activate winches that move cars under sawing cables or saw frames.
- Type instructions on computer keyboards, push buttons to activate computer programs, or manually set cutting guides, clamps, and knives.
- Wash stones, using water hoses.

#### Detailed Tasks

breaks in thread, or machine malfunctions.

- Mount attachments, such as needles, cutting blades, or pattern plates, and adjust machine guides according to specifications.
- Perform equipment maintenance tasks such as replacing needles, sanding rough areas of needles, or cleaning and oiling sewing machines.
- Perform specialized or automatic sewing machine functions, such as buttonhole making or tacking.
- Place spools of thread, cord, or other materials on spindles, insert bobbins, and thread ends through machine guides and components.
- Position and mark patterns on materials to prepare for sewing.
- Position items under needles, using marks on machines, clamps, templates, or cloth as guides.
- Position material or articles in clamps, templates, or hoop frames prior to automatic operation of machines.
- Record quantities of materials processed.
- Remove holding devices and finished items from machines.
- Repair or alter items by adding replacement parts or missing stitches.
- Select supplies such as fasteners and thread, according to job requirements.
- Start and operate or tend machines, such as single or double needle serging and flat-bed felling machines, to automatically join, reinforce, or decorate material or articles.
- Tape or twist together thread or cord to repair breaks.
- Turn knobs, screws, and dials to adjust settings of machines, according to garment styles and equipment performance.

#### Detailed Tasks

##### Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- cut or trim fabric or leather
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- maintain consistent production quality
- maintain production or work records
- monitor production machinery/equipment



## Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- cut or shape stone, tile, brick, or related material
- direct and coordinate activities of workers or staff
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- monitor production machinery/equipment operation to detect problems
- operate forklift
- operate glass or stone working equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- operate woodworking equipment/machinery
- perform safety inspections in manufacturing or industrial setting
- read blueprints
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- set up production equipment or machinery
- signal directions or warnings to coworkers
- sort manufacturing materials or products
- understand technical operating, service or repair manuals
- use hand or power tools
- use hand or power woodworking tools
- use precision measuring tools or equipment
- work as a team member

operation to detect problems

- operate sewing machine
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- repair tears or defects in fabrics, garments, or leather products
- sew by hand
- use hand or power tools
- use portable electric fabric cutter

## Labor Market Comparison



Description	Cutting and Slicing Machine Setters, Operators, and Tenders	Sewing Machine Operators	Difference
Median Wage	\$ 31,350	\$ 22,440	\$( 8,910)
10th Percentile Wage	\$ 23,000	\$ 16,350	\$( 6,650)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 43,790	\$ 27,200	\$( 16,590)
90th Percentile Wage	\$ 49,280	\$ 31,710	\$( 17,570)
Mean Wage	\$ 34,670	\$ 23,030	\$( 11,640)
Total Employment - 2007	710	1,080	370
Employment Base - 2006	767	1,077	310
Projected Employment - 2016	593	990	397
Projected Job Growth - 2006-2016	-22.7 %	-8.1 %	14.6 %
Projected Annual Openings - 2006-2016	12	10	-2

### National Job Posting Trends

Trend for Cutting and Slicing Machine Setters, Operators, and Tenders

Trend for  
Sewing  
Machine  
Operators

#### Job Trends from Indeed.com



Data from [Indeed](http://Indeed.com)

### Recommended Programs

No program data for the occupation.



## Maine Statewide Promotion Opportunities for Cutting and Slicing Machine Setters, Operators, and Tenders

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	100	2	710	\$31,350.00	\$0.00	-23%	12
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	90	2	910	\$38,230.00	\$6,880.00	-26%	23
51-4023.00	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	87	2	0	\$33,460.00	\$2,110.00	0%	0
51-9023.00	Mixing and Blending Machine Setters, Operators, and Tenders	86	1	420	\$36,040.00	\$4,690.00	-9%	7
51-5021.00	Job Printers	86	3	140	\$31,890.00	\$540.00	-10%	2
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	86	2	300	\$32,980.00	\$1,630.00	-18%	9
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	86	2	850	\$38,860.00	\$7,510.00	-26%	19
51-4034.00	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	85	3	110	\$34,350.00	\$3,000.00	-9%	2
51-4121.07	Solderers and Brazers	85	2	1,610	\$38,030.00	\$6,680.00	7%	49
51-4193.00	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	84	2	120	\$32,160.00	\$810.00	16%	5
51-4191.00	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	84	2	40	\$32,470.00	\$1,120.00	-6%	1



51-9011.00	Chemical Equipment Operators and Tenders	84	2	0	\$38,790.00	\$7,440.00	-2%	5
51-2021.00	Coil Winders, Tapers, and Finishers	83	2	90	\$31,910.00	\$560.00	-53%	1
51-4032.00	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	83	2	100	\$33,030.00	\$1,680.00	-22%	2
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	82	2	120	\$36,960.00	\$5,610.00	2%	3

### Top Industries for Sewing Machine Operators

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Cut and sew apparel manufacturing	315200	37.46%	87,218	36,829	-57.77%
Other textile product mills	314900	8.50%	19,797	17,782	-10.18%
Textile furnishings mills	314100	7.91%	18,422	16,690	-9.40%
Self-employed workers, primary job	000601	7.29%	16,967	18,076	6.54%
Household and institutional furniture manufacturing	337120	6.35%	14,794	12,383	-16.30%
Apparel accessories and other apparel manufacturing	315900	2.75%	6,400	4,026	-37.09%
Apparel knitting mills	315100	2.14%	4,987	2,805	-43.75%
Medical equipment and supplies manufacturing	339100	2.01%	4,674	4,781	2.29%
Other furniture related product manufacturing	337900	1.88%	4,384	4,577	4.40%
Printing and related support activities	323100	1.73%	4,029	3,192	-20.77%
Motor vehicle parts manufacturing	336300	1.48%	3,443	2,741	-20.39%
Fabric mills	313200	1.36%	3,162	2,233	-29.38%
Drycleaning and laundry services	812300	1.35%	3,133	3,133	0.01%
Clothing stores	448100	1.31%	3,053	2,973	-2.63%
Footwear manufacturing	316200	0.92%	2,134	1,000	-53.16%

### Top Industries for Cutting and Slicing Machine Setters, Operators, and Tenders

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
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Converted paper product manufacturing	322200	15.71%	12,381	10,390	-16.08%
Printing and related support activities	323100	12.36%	9,738	7,716	-20.77%
Plastics product manufacturing	326100	8.03%	6,327	6,707	6.00%
Pulp, paper, and paperboard mills	322100	5.55%	4,376	3,036	-30.64%
Animal slaughtering and processing	311600	5.30%	4,180	4,770	14.13%
Rubber product manufacturing	326200	4.91%	3,867	2,731	-29.39%
Glass and glass product manufacturing	327200	4.39%	3,461	3,020	-12.76%
Fruit and vegetable preserving and specialty food manufacturing	311400	2.17%	1,712	1,552	-9.33%
Other food manufacturing	311900	1.83%	1,441	1,511	4.85%
Bakeries and tortilla manufacturing	311800	1.60%	1,262	1,289	2.15%
Self-employed workers, primary job	000601	1.56%	1,230	1,311	6.54%
Dairy product manufacturing	311500	1.52%	1,197	1,185	-1.07%
Other chemical product and preparation manufacturing	325900	1.41%	1,108	872	-21.33%
Fabric mills	313200	1.06%	833	588	-29.38%
Veneer, plywood, and engineered wood product manufacturing	321200	0.81%	637	694	8.89%